d. Protection of E-911 operations

Petitioners urge the Commission to include in any new rules covering contraband wireless device solutions an explicit statement that E-911 systems may not be compromised by solution operations except in the limited circumstance of authorized jamming systems. Any jamming system should be required to be approved by the PSAP operator whose area covers the prison location. Petitioners believe that the PSAP operator, as a local public safety official, is in the best position to determine whether an E-911 impact serves the public interest in protecting public safety in that specific area, and can assure that all affected public safety organizations are aware of the system that has been authorized.³⁰

D. Jamming

1. Not Prohibited by Section 333

Conventional wisdom holds that Section 333 of the Communications Act of 1934, as amended, (the "Act")³¹ limits FCC jurisdiction to authorize jamming. Petitioners offer three viable interpretations of the Act that permit the Commission to authorize jamming: (1) Section 333 was not intended to limit the Commission's authorization for jamming; (2) whatever Section 333 means, it applies equally to the FCC and NTIA, ³² and since NTIA has consistently found it can authorize jamming, FCC has the same authority; and, (3) a change to Section 22.3(b)³³ of the Commission's Rules would make the illicit use of wireless devices within correctional facilities generally unauthorized, and therefore jamming would not be prohibited by any reading of Section 333.

³⁰ By law and policy, inmates and staff on prison property do not need mobile access to 911 operators. For decades, prison administrators have developed systems and procedures for dealing with emergencies and for protecting the public, prison staff, and visitors, and inmates. These policies, practices and procedures have been upheld against repeated challenges in state and federal courts.

³¹ Pub. L. 101-396, §9, September 28, 1990, 104 Sta. 850; 47 U.S.C. § 333.

³² See Senate Report (Commerce, Science, and Transportation Committee) No. 101-215, 101st Cong., Nov. 19, 1989 ("The provision in the reported bill also applies to Federal Government radio communications. Interference to these communications is now covered by 18 U.S.C. §1362. The inclusion of this new provision will provide the FCC with a stronger basis for investigating and seeking prosecution of interference complaints by Federal agencies.")("S.R. 101-215")[emphasis added]

³³ 47. C.F.R. § 22.3(b).

a. Legislative Intent of Section 333

While there are several Commission staff letters written under delegated authority that are consistent with it, Petitioners are not aware of any explicit statement by the Commission staff that the Commission lacks the jurisdiction to authorize jamming or any instance where the Commission, *en banc*, has ever adopted this interpretation of the statute.³⁴ CTIA has offered that "The Commission cannot ignore Section 333 of the Act or its extensive history of declaring wireless jamming technology illegal,"³⁵ yet this interpretation ignores the legislative history of Section 333 and the overriding intent of the Act. The legislative history reveals that Congress, in considering this amendment to the Act, did not intend to limit the jurisdiction of the Commission by forbidding it from ever authorizing any jamming. Indeed, it was the Commission that requested this legislation in response to a series of intentional jamming incidents in which the jammer was using a licensed transmitter and thus could not be prosecuted for criminal violation of Section 301.³⁶ The Senate report summarized the impact of the new legislation by stating, "The reported bill remedies this situation by *giving the FCC the explicit authority* to halt willful or malicious interference..."³⁷ The provision was meant to confer upon the FCC the discretion to exercise authority, not prohibit the FCC from exercising discretion.

With respect to the Commission's "extensive history of declaring wireless jamming technology illegal," there is an absence of clear evidence that the Commission has *ever* spoken on any interpretation of Section 333. Furthermore, staff interpretations have generally focused on a point of agreement: that under *present* FCC Rules, the sale and use of jammers is not authorized and hence is illegal. None of the

³⁴ We note that many Commission staff actions rejecting prison jamming requests have avoided judging the meaning of Section 333 and focused on the noncontroversial fact that at present no Commission rules authorize jamming and hence the sale of jamming equipment and jamming by the Commission licensees are not legal. *See* Letter from James D. Schlichting, Acting Chief, Wireless Telecommunications Bureau to Devon Brown, Director, District of Columbia Department of Corrections, DA 09-354 (dated Feb. 18, 2009) (http://hraunfoss.fcc.gov/edocs/public/attachmatch/DA-09-354A1.pdf).

³⁵ CTIA Petition at p.4.
36 House Report (Energy and Commerce Committee) No. 101-316, October 27, 1989 ("H.R. 101-316").

staff documents cited by CTIA explicitly agree with CTIA's contention that Section 333 is a "statutory prohibition...on interference."

CTIA presented this interpretation of Section 333 in its 2007 Petition for Declaratory Ruling.³⁸ CTIA cited no direct precedent of staff action, no Commission decision and no case law to support this interpretation. Indeed, the *CTIA Petition* relies primarily on a 2005 Public Notice³⁹ that based its conclusion on the plain language of "47 USC § 302a(b) and Section 2.803(a) of the FCC's rules" – not on a general statement that §333 prohibits Commission authorization of jamming.

A 2011 Public Notice on jamming, issued under delegated authority, stated as follows:

"As to operation, section 333 of the Communications Act prohibits "willful or malicious" interference to authorized radio communications, and thus prohibits the operation of jammers." ⁴⁰

But even this Public Notice fails to adequately support CTIA's requested declaratory language.

Even if the language of Section 333 is broader than its original intent, the question of whether illicit

CMRS devices within a correctional institution, where their mere possession violates state criminal

statutes, have valid FCC authorization (and therefore interference protection under this section) gives the

Commission the option of modifying its rules to permit limited jamming. Section 333 is limited in its

application to willful or malicious interference with authorized radio communications. Obviously, the

federal government has not, and could not, "authorize" the use of wireless devices by inmates in federal,

state or county correctional facilities where the possession or use of such devices is illegal, as a matter of

³⁸ The Wireless Association, Petition for a Declaratory Ruling of CTIA (Nov. 2, 2007)

(http://files.ctia.org/pdf/filings/FINAL--CTIA-- Jammers Petition for Declaratory Ruling.pdf). The Commission has never acted on the "jammer" portion of this petition, which sought a declaratory ruling "that the sale and use of jammers — with the exception of sales to and use by the federal government — is unlawful." The section of the petition dealing with "wireless boosters and repeaters" is now pending in the Signal Booster NPRM.

39 Public Nation "Sale on Hope of Transmitters Decigned to Brayent Law of Interfero with Cell Phone.

³⁹ Public Notice, "Sale or Use of Transmitters Designed to Prevent, Jam or Interfere with Cell Phone Communications is Prohibited in the United States", DA-05-1776, June 27, 2005 (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-05-1776A1.pdf).

FCC Enforcement Advisory, "CELL JAMMERS, GPS JAMMERS, and OTHER JAMMING DEVICES", DA 11-249, February 9, 2011 (http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0209/DA-11-249A1.pdf)
 The following states have either laws, or bills introduced, that declare wireless devices to be contraband in the hands of inmates: Alabama, Arizona, California, Georgia, Iowa, Maryland, Mississippi, New York and Texas.

state law or federal policy. Accordingly, the Commission has inherent authority to permit limited jamming in such correctional facility settings. Section 22.3(b) of the Commission's Rules exempts CMRS customers from the Section 301 licensing requirement. Petitioners propose § 22.3(b) be modified so it is clear that where state and local law make CMRS subscriber equipment illegal in corrections facilities, such use is also illegal under federal law.

b. Section 333 applies equally to the FCC and NTIA

NTIA already maintains that it has the jurisdiction to authorize jamming by federal government entities, 42 but that the FCC is forbidden by Section 333 to authorize any jamming. 43 Petitioners believe that this is an erroneous reading of Section 333 and that Section 333 applies to both agencies equally. NTIA offers no explanation or support for its position that Section 333 limits the FCC's jurisdiction but does not limit its own.

Section 333, aptly entitled "Provisions Relating to Radio," applies to all radio uses within the United States. It contains no language limiting its application to the FCC's non-Federal Government jurisdiction. Section 301 of the Communications Act makes no reference to the FCC, but rather simply provides for federal authority over all spectrum use and requires a license for such use. The general radio jurisdiction of the Commission is spelled out in Section 303. Section 305 exempts government radio uses from the Commission's authority granted under Sections 301 and 303, but not from the rest of the Act. Act.

⁴² NTIA, "Emission Measurements of a Cellular and PCS Jammer at a Prison Facility", NTIA Report TR-10-466, May 2010, at p. 2 (http://www.its.bldrdoc.gov/pub/ntia-rpt/10-466/10-466.pdf).

NOI at 26734 ("Currently, the operation by non-Federal entities of transmitters designed to jam or block wireless communications violates the Communications Act of 1934, as amended.")

NTIA, "CONTRABAND CELL PHONES IN PRISONS: Possible Wireless Technology Solutions", ("NTIA Jamming Report") December 2010, at p. 16.

(http://www.ntia.doc.gov//reports/2010/ContrabandCellPhoneReport_December2010.pdf)

^{44 47} U.S.C. § 301.

⁴⁵ 47 U.S.C. § 303.

^{46 47} U.S.C. § 305.

Section §305(a) states:

Radio stations belonging to and operated by the United States shall not be subject to the provisions of sections 301 and 303 of this title. All such Government stations shall use such frequencies as shall be assigned to each or to each class by the President. All such stations, except stations on board naval and other Government vessels while at sea or beyond the limits of the continental United States, when transmitting any radio communication or signal other than a communication or signal relating to Government business, shall conform to such rules and regulations designed to prevent interference with other radio stations and the rights of others as the Commission may prescribe. (Emphasis added)

While the statute clearly exempts "[r]adio stations belonging to and operated by the United States" from Sections 301 and 303, and hence the jurisdiction of the Commission, it clearly does not exempt such stations from *all* the provisions of Title III.

Likewise, in 1986, Congress passed a more limited criminalization of jamming dealing only with communications satellites.⁴⁷ This Title 18 criminal statute states:

§ 1367. Interference with the operation of a satellite

- (a) Whoever, without the authority of the satellite operator, intentionally or maliciously interferes with the authorized operation of a communications or weather satellite or obstructs or hinders any satellite transmission shall be fined in accordance with this title or imprisoned not more than ten years or both.
- (b) This section does not prohibit any lawfully authorized investigative, protective, or intelligence activity of a law enforcement agency or of an intelligence agency of the United States. 48 (Emphasis added)

While 18 U.S.C. 1367(a) criminalizes satellite jamming similarly to the subsequent provisions of Section 333, it clearly provides that certain types of federal agencies are exempt. Yet, four years later, the language of Section 333 has no such exemption. Accordingly, whatever Section 333 means, it applies equally to both NTIA and the FCC. If the agencies believe that the FCC lacks that jurisdiction to authorize jamming to preserve the public safety, than NTIA also lacks that jurisdiction. The logical consequence is that federal law enforcement and intelligence agencies are forbidden use of the same

⁴⁷ P. L. 99-508, October 21, 1986, 100 Stat. 1872

⁴⁸ 18 U.S.C. 1367

jamming tools that NTIA finds the FCC may not authorize for legitimate state and local government public safety agencies to protect the public.

2. Specific Rule Changes--Jamming

a. Amending Section 22.3(b)

Just as the Commission has inherent, statutory authority to permit limited jamming of "unauthorized" radio communications, the Commission has long recognized its rulemaking authority in this area. Section 22.3(b) is precisely such a rule. It provides:

Authority for subscribers to operate mobile or fixed stations in the Public Mobile Services, except for certain stations in the Rural Radiotelephone Service, is included in the authorization held by the licensee providing service to them. Subscribers are not required to apply for, and the FCC does not accept applications from subscribers for, individual mobile or fixed station authorizations in the Public Mobile Services, except that individual authorizations are required to operate rural subscriber stations in the Rural Radiotelephone Service under certain circumstances. 49

This rule was created independent of any statutory mandate, to avoid the absurdity of requiring CMRS customers to obtain a license to use their wireless devices. The Commission is free to amend the rule, in the public interest and to avoid an equal absurdity; providing federal protection to the illegal use of a wireless device. Section 22.3(b) should be amended to provide that the unauthorized use of a wireless device within the defined area of a correctional facility is not a licensed or authorized use for purposes of application of the Commission's rules. This approach is statutorily sound, logical and consistent with Commission rule-making in this area.

b. Prohibition on jamming cannot apply to unauthorized operations under Section 22.3(b)

Section 333 of the Communications Act and the rules that enforce it should only protect communications that are in the first instance lawful. Wireless devices that have been deemed contraband by state or

⁴⁹ 47 C.F.R. 22.3(b)

federal law or correctional facility rule cannot be used in a manner that is considered authorized by either the FCC or the carrier from which the service is received. Amending Section 22.3(b) of the Commission's rules would permit the Commission to authorize the jamming of signals from contraband wireless devices.

The modification can be as simple as limiting the authority conferred by Section 22.3 to those mobile and fixed stations that are operated legally. Petitioners request that the Commission propose an amendment to Section 22.3(b) by adding the following text:

"This authority does not apply to the unauthorized or unlawful operation of CMRS devices on correctional facility property."

i. "Overjamming"

Any system providing control of cellular communications inside a prison may have some overreach. This is true for both jamming systems and managed access systems. While strength of radio signals in free space decrease with distance from their source following an inverse square law just like optical light, commercial mobile wireless systems operate in a much more complex propagation environment, with reflections from terrain and structures shading some areas, thereby decreasing radio signal strength, while increasing signal strength in other places due to reinforcements from reflections. Even so, radio propagation is no longer the totally unpredictable, random phenomenon that it was when the Commission was formed in 1934. The high efficiency of cellular spectrum reuse has been enabled by software products that remove most of the uncertainty from radio propagation for cellular networks by using advanced propagation computer models that did not exist when cellular service was first authorized in the 1980s.

In a June 2010 filing at NTIA⁵⁰, CTIA introduced the term "overjamming." CTIA wrote: However, because wireless jamming signals cannot be confined to precise geographic boundaries, and because radio waves propagate in a non-linear way, jamming an entire facility will require 'over-jamming' in which the harmful signal extends beyond the walls of the prison facility and

⁵⁰ NOI, Comments of CTIA, at p. 20-22